DOCUMENT RESUME

ED 244 109 CE 038 941

AUTHOR Claus, John F.
TITLE An Ethnographic Investigation of Attitude Development in Vocational Education: The Importance of Ethnographic Meaning.
PUB DATE Apr 84
NOTE 52p.; Paper presented at the Annual Meeting of the American Educational Research Association (68th, New Orleans, LA, April 23-27, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Attitude Change; Case Studies; *Educational Benefits; Educational Research; *Ethnography; Improvement; Outcomes of Education; Secondary Education; *Social Development; State Surveys; *Vocational Education; *Work Attitudes
IDENTIFIERS New York

ABSTRACT

An ethnographic, case-study complement to a statewide survey in New York State attempted to shed light on the interwoven personal, social, economic, and program factors underlying secondary vocational education students' reports of improved attitudes. The survey assessed whether the state's two-year, half-day, separate-facility vocational programs were achieving a positive effect upon the social or nontechnical development of their students. Building on the findings of the statewide questionnaire and its companion interviews, the ethnographic study employed classroom observation, indepth interviewing, relevant documents, and inductive analysis to identify those characteristics of a vocational program and its students that, in their interaction, constitute attitude-influencing events. A vocational course (Food Preparation I and II) was studied. Findings suggested that even though most vocational students find their programs enjoyable and rewarding, many of the developmental effects of these programs are actually the product of an interwoven assemblage of personal, economic, sociocultural, and program factors and work against the goal of increasing participants' opportunities. (YLB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED244109

An Ethnographic Investigation of Attitude Development in Vocational Education: The Importance of Ethnographic Meaning

John F. (Jeff) Claus
Cornell University

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J F Claus

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

A paper presented at the annual meeting
of the American Educational Research Association, New Orleans, 1984.

CE038994

Precis

Recent survey research points to an association between participation in certain secondary vocational education programs and the development of improved attitudes toward self, school, work and others. There is considerable disagreement, however, over the meaning of this finding. While some suggest it reflects vocational education's capacity to enhance the resourcefulness of its often disadvantaged participants, others argue that it reveals the process by which vocational education inhibits the opportunity of these youth by fostering compliant work attitudes and an acceptance on their part of low status employment. This study, designed as an ethnographic complement to a statewide survey, suggests that even though most vocational students find their programs enjoyable and rewarding, many of the developmental "effects" of these programs are actually the product of an interwoven assemblage of personal, economic, sociocultural and program factors and work against the goal of increasing participants' opportunity. This conclusion points up the importance of giving ethnographic meaning to survey findings. It also serves as the basis for policy recommendations, which include democratizing workplaces, eliminating tracking in public schools, and emphasizing entrepreneurial activities, heterogeneous grouping and participatory democracy in vocational programs.

Introduction

In the present period of high youth unemployment, tight budgets, and declining school enrollments there is a growing demand for accountability on the part of secondary vocational education programs. From the people who fund and administer these programs to students, counselors, teachers, parents, and potential employers, there is increasing concern over whether these programs are achieving what is expected of them.

This concern has generated a substantial number of evaluation-oriented studies in the vocational education research field during the past 15 years. Most of these studies have attempted to assess whether vocational education has a positive effect upon its graduates' employability or earning power. These are called economic return studies and generally focus on the wages, fields of employment, and employment histories of program completers. Somewhat disappointingly the evidence these studies provide in review is inconclusive. It is possible, for example, to assemble seemingly valid and comparable studies in support of both the negative and positive responses to the question (Weisberg, 1983; National Commission for Employment Policy, 1981; National Institute of Education, 1981; Mertens, et al., 1980).

This inconclusiveness has proven unsatisfying to many in the field, especially to those federal policy makers faced recently with decisions concerning levels and types of funding for vocational education. As a result, there has been some interest of late in the non-economic effects of vocational program participation. For some there is an interest in finding new ways to justify the perpetuation of funding for existing vocational programs and facilities; for others the interest lies in uncovering program effects which may have a value in their own right or which may help to untangle the inconclusiveness of the economic return studies.

The study to be reported here begins with the small body of research concerning the attitudinal impact of secondary vocational education. This is the area of non-economic effect to which the most research attention has been given. Among these studies there is

a majority conclusion that an association exists between participation in certain kinds of secondary vocational programs (e.g. separate-facility, intensive, experiential programs) and the development of improved attitudes toward self, school, work, and others (Walker, Claus, Ridley, and Bowers, 1982; Elson and Gerken, 1979; Far West Laboratory, 1976; Davidson and Johnston, 1976; Fetters, 1974). This is an important finding. In a period when broad federal support for secondary vocational education has come under close scrutiny and studies of the economic returns of vocational programs have proven inconclusive, it may demonstrate that vocational education does offer its participants a positive alternative to the conventional high school curriculum.

There is considerable disagreement, however, over the meaning of these findings. Some argue they reflect vocational education's capacity to enhance the citizenship skills, employability, and life resourcefulness of its often disadvantaged or academically alienated participants (Silberman, 1980; Conroy, 1979; Barton and Fraser, 1978). Others suggest they illustrate how vocational education inhibits the opportunity of such youth by fostering compliant work attitudes and an acceptance on their part of low status employment (Apple, 1979; O'Toole, 1977; Bowles and Gintis, 1976). This is a serious debate. It has implications for the design and even the existence of secondary vocational programs throughout the United States.

At the heart of this controversy is a paucity of information about the process by which students' attitudes appear to change in conjunction with vocational program participation. Most of the studies reporting an association between improved attitudes and vocational education are outcome studies based on self-report questionnaires which pay little attention to interacting factors that may contribute to students' attitude development. Too often these studies have employed broad comparisons between vocational and non-vocational groups and have oversimplified potentially contributory program features and non-school variables. This is a serious problem in outcome studies in general (Pillemer and Light, 1980; Cook and Campbell, 1979) and in vocational program

studies in particular (Rossi and Berk, 1981; Woods, 1980; Mertens, et al., 1980; Darcy, Bolland, Farley, and Taylor, 1979). Vocational students are a self-selected group likely to possess backgrounds, skills and aspirations somewhat different from those of the groups with whom they are often compared (Woods, 1980; Allan and Gorth, 1979; Grasso and Shea, 1979). Thus, differences which appear between vocational and non-vocational groups at the completion of a program may not reflect program impact, but, rather, differences which preceded the program and escaped detection of the survey measures. Or, such differences may reflect differential interactions between certain kinds of students and certain program features. Surely, attitude and social development is the product of a wide assemblage of personal, social, economic, and program factors, and we know little of such interwoven elements as they are manifest in the lives of secondary vocational students.

In addition, the validity and reliability of many of the conventional measures of attitude development are open to question. The most commonly employed method of measuring attitudes and social development is to ask subjects to report on their own feelings and behavior by responding to scale-type items on a questionnaire. This is the approach used in all of the attitudinal studies cited above. The primary difficulty with this approach is that the meaning of the data produced is often inconsistent and difficult to ascertain (see Weiss, 1980; Eisner, 1979; Anistasi, 1976; Cronbach, 1972; Wylie, 1961). Specifically, respondents are inclined in questionnaire self-reports to be influenced by their beliefs about what is socially desirable either among their peers or in society at large. Thus, what is measured may not be a behavioral actuality but rather a belief about what is desirable or acceptable in a certain context. Or, it may represent a short-term, program - specific attitude change that does not transfer to other settings and does not survive over time (see Bronfenbrenner, 1979). Similarly, different groups of respondents may attribute different meaning to an item in accordance with their differing values and experience. In this case, the differences registered may not reflect a difference along the

dimension assumed to have been measured by the researchers; instead, it may be the result of respondents' differing perceptions of what the item asked. And so, it is not always clear what the attitude development measured by vocational outcome studies has meant. The students' self-reports are often difficult to assess without a first-hand knowledge of the behavior, experiences, and motivations which provide meaningful context for the questionnaire responses. In short, the notion of "program outcomes" tends to oversimplify and obfuscate the process and meaning behind student reports of program related development, especially when questionnaires are the key data source. Thus, the disagreement over the meaning of the attitude development associated with vocational education persists, in part, because so much is left to speculation. Existing research tends to fuel rather than resolve the controversy.

The study to be reported here offers an interpretation and evaluation of the findings in dispute. Designed as an ethnographic, case-study complement to a statewide survey in New York State (Walker, et al., 1982), this research attempts to shed light on the interwoven personal, social, economic and program factors underlying secondary vocational education students' reports of improved attitudes. It attempts to answer the question: Why do a significant number of vocational students report improved attitudes toward themselves, school, others and work in conjunction with participation in their vocational programs? And, it offers an evaluation of the reported attitude development and its sources as these pertain to the vocational education objective of improving the opportunity of disadvantaged or alienated youth.

The Statewide Survey

The statewide survey that serves as a point of origin for this study is a good example of the non-economic outcome studies which have been conducted recently in the vocational education field. Funded by the State Education Department of New York, its purpose was to assess whether the state's two year, half-day, separate-facility vocational

programs were achieving a positive effect upon the social or non-technical development of their students. With this objective cast in outcome and survey terms by the funding agency, data collection consisted of two methods: 1) a nine-scale attitudinal questionnaire designed specifically for the study and administered near the end of the school year to 2078 vocational and 1697 non-vocational high school seniors, and 2) standardized but flexible interviews with a sample of 30 vocational and 30 non-vocational seniors. The vocational and non-vocational samples were drawn to represent seniors in the state's 52 two-year, half-day, separate-site vocational facilities and in the "feeder" or "home" schools that send students to these programs. It should be noted that these facilities and their feeder schools did not include New York City or any of the inner city sections of the major upstate urban areas.

Consistent with state statistics the vocational and non-vocational samples differ in the following ways: of the home school students 46% were male and 54% female, while in the vocational sample the percentages were reversed; 13% of the vocational and 15% of the home school samples were minority students; 56% of the home school students were pursuing a college prep curriculum while only 9% of the vocational students were taking such a course of study; 31% of the home school students had fathers whose highest level of education included college, while 12% of the vocational students fell into this group; and 57% of the vocational students' fathers held laboring or trade-oriented jobs while 40% of the home school group occupied this category. Thus, each group was held to be representative of its particular universe, and the two samples differed in predictable ways (see Walker, et al., 1982; Office of Education Department Statistics, 1979).

The purpose of the questionnaire was to document any social or attitudinal outcomes associated with the vocational programs under study. Employing ten dichotomous independent variables and a stepwise linear regression analysis of the survey data, the study was able to isolate a statistical link between participation in vocational education and positive responses on four of the nine scales. With all independent variables other

than the one defining the vocational/non-vocational difference held statistically constant (e.g. gender, high school track, grades, race, parents' income, etc.), vocational students reported greater confidence in their job skills, greater clarity of career goals, and more positive attitudes toward school and their peers than did the cross section of non-vocational students. Of the other five scales one, trustingness, produced no significant results; another, social autonomy, registered as its most significant determinant high school track, with college-prep students reporting the greatest sense of social independence; and three, the motivation to learn, social confidence, and openness scales, were influenced primarily by gender, with females registering the more positive responses on all three.

Arguing that the non-vocational cross section represented a norm against which vocational education might be compared, the study concluded that the survey shows participation in vocational education to be associated with confidence in job skills and career direction and positive attitudes toward school and peers. The commonsense articulation of these results is that even when the effects of grades, high school track, parents' education, etc. are removed, participation in vocational education does have a distinguishable and positive effect along the four dimensions.

At face value this implies a positive evaluation of the vocational programs considered. If we allow that the measures and analyses employed are valid, it appears that vocational students' responses along the four dimensions are explainable primarily by the students' participation in vocational education. But, we might ask, are these inherently positive responses? Why did these students respond as they did to the items on the questionnaire?

First, we must consider the items themselves. Upon close inspection one finds that the questions asked of students on the statewide questionnaire have a much narrower scope than their scale titles (e.g. attitude toward school or peers) imply. Specifically, one finds that vocational students were more inclined than non-vocational students to agree

with statements such as: I look forward to going to this school most days; The things I learn at this school are important for my future; Students treat each other with respect at this school; Students here will help each other to learn; I have several skills that will help me to get a job; I know how to present myself to a job interviewer; and I have a clear idea of the kind of career I want. Thus, what the questionnaire results really tell us is that senior vocational students liked their vocational programs and their fellow vocational students (not all school and all peers) better than non-vocational seniors liked their high schools and the students in them. Similarly, we see that the vocational students were more confident that they possess several job - relevent skills, know what kind of career they want, and are employable in their chosen areas. They were not necessarily more positive with regard to the general prospect of working or more confident or optimistic about their opportunities in the world of work at large.

This provides a much narrower set of findings than is suggested by the questionnaire scale titles. Qualified in this way the survey findings do little to dispute the argument that vocational education functions to "cool out" or socialize unsuccessful working and lower class youth into workers willing to fulfill the low status labor needs of a corporate, capital-based economy. In fact, given the trades for which vocational programs prepare students, these results can be used to support such a critique, especially if they are combined with the negative findings of some of the economic-return studies.

This is a problem with many of the studies in this area (e.g. Beach, 1978; Davidson and Johnston, 1976; Market Opinion Research, 1973). Most have a narrower scope than they imply, and the findings of many can be argued to support either side of the opportunity/inequality debate depending on one's philosophical perspective (see O'Toole, 1977, for an example of how seemingly positive outcome studies can be used to support a critique of vocational education). Nevertheless, that vocational students like their programs and may gain work-related confidence in them are not insignificant findings. Well corroborated by other studies (Benson, 1981; Allan and Gorth, 1979; Bottoms, 1979;

Swanson, 1976; Texas Advisory Council, 1976) these findings suggest at least that vocational education is perceived as a positive educational and career-preparation experience by its participants, many of whom may have previously felt alienated and confused with regard to school and their preparation for work.

The interviews conducted as part of the statewide survey shed some light on the roots of this response. Certainly, they go further in this respect than most of the surveys. Nevertheless, they, too, leave unanswered many of the questions central to the debate concerning whether vocational education promotes resourcefulness or compliance, opportunity or inequality. The interviews were designed to elicit information about the processes by which vocational students might come to experience the development of more positive attitudes in their vocational programs. The emphasis was on explaining assumed program impact. Thirty vocational and 30 non-vocational students were interviewed, all being asked about such school-related factors as their school records and grades, student-teacher and peer relations, curriculum, classroom climate, methods of instruction, and school facilities and services. All students were also asked about a variety of non-school factors including: parents' occupations and education, parents' involvement in the students' education, students' work experiences and students' plans for the future. Vocational students were asked, especially, to make comparisons between their vocational and non-vocational programs, because pilot interviews suggested that vocational students' attitudinal responses to their vocational programs were often related to their previous experiences with school.

The interviews do indicate that vocational students liked and experienced what they considered positive development in their vocational programs. The vocational students consistently reported a variety of virtues associated with participation in vocational education. Vocational teachers were generally considered respectful, supportive, trusting and accessible, vocational peers were described as friendly and non-competitive, the curriculum was seen as pertinent to students' post-high school wants and needs, and the

hands-on, experiential approach to learning was considered interesting and effective. As a result of these program characteristics students reported the development of a better sense of direction, greater self-esteem, more confidence in their work and social skills and an improved ability to get along with others. In general, "occupational students attributed significant affective development to their occupational programs" (Walker, et al., 1982:6).

This response to vocational education did not occur in isolation of non-program factors, however. Vocational students made it very clear that they liked their vocational programs primarily because they represented a humane and relevant alternative to their regular high school experience. With corroboration from the reports of non-vocational students, vocational students noted that their experiences in the conventional high school had often been negative. In general, vocational students reported below average academic records, difficult relationships with their academic teachers, and negative self-images and student relations in their regular high schools. In combination with a tendency toward trade-oriented occupations and limited finances in their backgrounds, such factors appeared to make vocational students particularly receptive to the vocational school environment. Vocational classes seemed friendlier and less threatening, vocational teachers were thought to be more willing than academic teachers to reach out to less motivated or less successful students, and the methods of vocational training were considered more interesting and worthwhile. Thus, vocational education was considered by many participating students to be a welcome and rewarding alternative to the academic high school, in part because of the nature of their vocational programs and in part because of their backgrounds and prior school experiences.

The overriding conclusion of the statewide survey is, then, that at least for certain kinds of students (e.g. for those who have not done particularly well in school and who find semi-skilled work after high school a worthwhile option) vocational education is a positive alternative to the conventional academic curriculum. This is a common conclusion among

surveys reporting an association between vocational education and the development of positive attitudes. The argument states, generally, that vocational education may not be appropriate for everyone, but it seems to serve well many of the students who choose it.

This conclusion and the findings upon which it is based do not, however, help to resolve the opportunity vs. inequality debate. While the vocational programs considered may be perceived by their participants as a positive alternative, it is still possible to argue that this is an indication of the ways in which our schools propagate class inequality. Vocational programs do tend primarily to serve lower and working class youth who have not done well in school (Grasso and Shea, 1979). If, as a number of writers suggest, many of these youth have been unjustly disadvantaged at the hands of a school system which promotes and rewards students on the basis of skills, habits, attitudes, and manners closely associated with the work and culture of the middle and upper classes, it may be that the primary function of vocational education is to absorb the discontent unsuccessful lower and working class students experience in school by socializing them in such a way that they feel good about pursuing careers similar in quality and socioeconomic relations to those of their parents (see Apple, 1982; Bowles and Gintis, 1976; Bourdieu and Passeron, 1977; Rubin, 1976). Neither the vocational nor the non-vocational student reports in the statewide survey contradict such an interpretation. The development of vocational students' positive attitudes toward themselves and their work skills, vocational school peers, and vocational programs can be argued as an indication that vocational education is successful in this regard, especially if, as most of the attitude surveys indicate, these attitudes are specifically directed at the schooling and world generally associated with semi-skilled work.

Of primary importance here is the fact that studies of the association between vocational participation and the development of certain attitudes offer no first-hand, observational information about the processes and development underlying student reports of program impact. Student self-reports of development are difficult to evaluate without

observational data. It is not always clear, for example, what sort of interaction goes into a "friendly and caring" relationship between vocational students and their teachers. What does it mean in developmental terms when a vocational student reports that his or her teacher is "more helpful" than many home school teachers when an educational task is difficult? Similarly, it is not easy to ascertain the developmental significance of positive reports of peer relations when they may be rooted in the relative homogeneity of vocational students' backgrounds and prior negative experiences in school. In short, it seems possible for students to like a program and feel better about themselves near its completion, without having experienced opportunity-enhancing development.

The lack of observational information and the dispute its absence helps to sustain are the motivating forces behind the ethnographic investigation reported here. Even though more conclusive economic return studies are possible and will be helpful in assessing the capacity of vocational education to increase work-related opportunity, such studies do not easily address the compliance vs. resourcefulness debate. Thus, this research attempts to describe and analyze the experiences and perspectives underlying vocational students' reports of positive attitude development. What is it like, I asked, to be a vocational student? And, what really happens with, to, and for these students in their vocational programs?

The Ethnographic Investigation

Building on the findings of the statewide questionnaire and its companion interviews this study employed classroom observation, in-depth interviewing, relevant documents, and inductive analysis in the interest of identifying those characteristics of a vocational program and its students which, in their interaction, constitute attitude influencing events. The object of study was a vocational course (Food Preparation I and II) identified by various program administrators and recent course graduates as effective with regard to attitude development. This course is one of 18 offered by a separate, centralized facility

serving eight area high schools in upstate New York. Students participate in the course by choice and attend a half day of each school day during their junior and senior years.

The cornerstone to the study was the observation of both the first and second year food prep classes, three days a week, throughout the fall semester. The study also included interviews with all food prep students (eight males and twelve females in the first year class and eight males and seven females in the second year class), their vocational teacher and teacher's aide, and their vocational school principal. In addition, parents were sent an open-ended questionnaire regarding their work and valuation of various types of education, and relevant documents were gathered concerning students' school performance, the employment histories of recent course graduates, and the state of the local economy as it pertained to the job market these students might face upon graduation.

It is important to note that the students in the two classes observed (Food Prep II in the morning and Food Prep I in the afternoon) were, at least in general ways, similar to the vocational students included in the statewide sample. This is to say they were not atypical. With the two food prep classes combined, 14% were minority students as compared with 13% in the survey; 14% were pursuing a college-prep curriculum as compared with 9% for the survey; 75% fell into a lower-middle or working class category on the basis of their parents' occupations, while this was true of 61% in the survey; and 80% considered themselves average or below average students as compared to 82% for the survey. In addition, many of the students in the ethnographic study reported experiences and perspectives similar to those related by the survey interviewees. For example, the students in the ethnographic study clearly viewed their vocational program as a positive alternative to the regular high school curriculum. Most reported negative experiences in their home schools, including poor grades, social discomfort, boredom with conventional methods of teaching and learning, and teachers who often seemed unsympathetic. And, many felt that their relationships with their vocational teacher and her aide were helpful

and caring, that their relationships with their vocational classmates were generally positive, and that the program helped build social and career-related confidence as well as enhance employability.

Herein lies one of the virtues of designing a small scale, ethnographic study as a complement to a large sample survey. If the subjects and events studied ethnographically can be shown to be similar in relevant ways to those considered by the survey, then the ethnographic study's power of explanation, with regard to the survey findings, is increased. Given the similarities recorded here, it seems reasonable to assume that the experiences and views of the students in the ethnographic study are fairly representative of those underlying the survey results. If this assumption is correct, the ethnographic investigation provides an interpretation of the survey results worthy of policy makers' attention.

Vocational Students' Frameworks All students attribute meaning and respond developmentally to their educational programs in light of a wide range of previous experiences. As Judith Hansen (1979) has written

> the stocks of knowledge students bring to any event, their repertoires of cognitive strategies and their interpretive frameworks, are essential components of these events (24).

It is important, then, that we understand what sort of frameworks vocational students bring to their programs. As already noted, the vocational students observed tended to come from lower-middle and working class backgrounds and to have poor academic records. This set of circumstances plays an important part in my attempt to understand these students and their responses to vocational education. In apparent connection with the work and educational experiences and values of their parents, as well as a lack of success in their own schooling, many of these students valued work experience over education as a means to opportunity.

As part of the ethnographic study vocational students' parents were mailed an open-ended questionnaire which asked about their work experience and views regarding

education, opportunity, and work-related success. Students were also asked about such factors in their interviews. Both parent and student reports indicate a predominant belief on the part of the parents that success, at least for people like themselves and their families, is best pursued by getting an entry-level, working class job and holding on to it in hopes of advancing within that workplace. It was assumed that this was an affordable and risk-limiting method by which one might achieve a modest degree of financial stability.

A small percentage of the parents in the study (11%) had little education and had suffered chronic unemployment. Not surprisingly, such parents valued highly for their children the goal of occupational security. In association with their own experiences with school and work, as well as their limited resources, both financially and academically, they felt the best approach was to get job training and experience as a part of and during one's public schooling and to find and hold a job right out of high school. The hope was that their children might avoid the economic and psychological anguish of inconsistent employment.

A much larger percentage of the parents in the study (75%) also had limited schooling (e.g. from eighth grade dropouts to a few with some community college) but had held such lower and working class jobs as county road crew member, factory laborer, janitor, short order cook, and cafeteria worker for as long as 20-25 years. A number of similar others had pursued trades, as an electrician or machinist for example, ever since they completed high school or got out of the armed services. Most commonly what this group of parents had pursued in their work was the stability of regular pay and benefits. Good working conditions and enjoyment were valued but generally as subordinate to the desire to achieve steady pay. This is particularly apparent in the seeming paradox that while many of these parents complained about close supervision, insensitive bosses, unnecessary regulations, and repetitious tasks in their work, most focused on stable pay and benefits as the motivating factors in their own work lives and as the things to look for in a job.

This was not entirely true of the few parents who ran their own businesses (e.g. a father with a small, rural machine shop, a mother who operated a beauty salon in her home, and a couple with a diner), although these parents, too, expressed considerable discomfort with the financial insecurity and long hours often associated with their work. Interestingly, it was only the few "professional" parents (three public teachers and a pharmacist) who stressed doing something you like and making a contribution to society when they discussed what to look for in a job.

And so, common to many of the parents in the study was the belief that a working class skill and job are accessible and desirable means to work-related success. With this belief were carried important attitudes toward education and schooling. Although many of these parents wanted their children to do well in school and to go on to college if possible, their valuation of education understandably seemed to rely more upon the precedents in their own experience with school and work than on the middle to upper class dictum that college is the gateway to personal development and occupational success. Experience and years of service, not advanced degrees, seemed the most accessible paths to the ends of a steady income and the ability to "provide for a family." In fact, some saw themselves as successful <u>because</u> they had gotten along despite little education. One father, a bus driver and aide at a psychiatric hospital for 22 years, wrote proudly, for example, "I have done better than most, <u>especially</u> since I quit school in 8th grade and read and write badly."

One of the questions on the parent questionnaire was, "How important do you think a college education is today?" In responding, many of these parents not only expressed a number of reasons why college did not seem very important to them, but they implied a certain animosity toward people who could readily afford college or who seemed to have gained positions of respect, wealth, and authority simply because of their college degrees. In general, these parents revealed a perception of opportunity rooted in an understanding that for people like themselves the advanced schooling so commonly associated with

professional careers and high salaries might not be as realistic or attainable a goal as it was for some others. The psychological and economic investments involved in pursuing advanced, non-technical schooling were seen to include significant risks, primary among them the risks of personal failure, of alienating family members and friends and of achieving only a limited return on substantial investments of time, energy, and money.

The prevailing response to the question regarding the importance of college was, "You can do just as well for yourself if you get out there, get a job and work at it." A machinist with 15 years seniority at a local factory wrote:

> I personally think experience is worth a lot more than a college degree. I don't think young people without a college education will find it more difficult. They may have to start at the bottom and work their way up, but someone at the top who doesn't know what they're doing is not an ideal pick for a job.

And, a couple, both of whom had been aides at a psychiatric hospital for 20 or more years, wrote:

> A college education isn't always necessary. Some of them (college graduates) are so smart they don't know anything. There are nurses who can memorize words in a book and not know a thing when it comes to taking care of people.

Thus, there was a sense that experience, in the form of time spent working, may produce a more practical and meaningful knowledge than does conventional schooling. There was also a belief that at least for them an academic education (i.e. higher education or any coursework without an explicit job orientation) might not open significant doors to opportunity. A couple who run a diner, and did not go beyond high school, wrote:

> It is so sad and such a waste to see children going to college and spending all that time and money, only to come out to a job of washing dishes, floors, etc. We have seen so much of this.

And, similarly, a mother with a part-time beauty salon in her home wrote:

> I really don't believe college is so important. One can't find a job anyway, after years of hard work in school. I am a hairdresser. I spent 8 months in beauty school after high school, and I do alright. My husband had no school after high school, and he has a machine shop.

This perception of a college education as limited in importance seems rooted in the parents' position in the work hierachy. A college education can be expensive for a lower or working class family with three or more children. It also produces diminishing returns as more and more people obtain it, and it is those in the lower half of the hierarchy who tend to obtain it later than many others. In addition, a college education is not a prerequisite for working class success, and it is the working class success pattern with which these parents are most familiar. Experience, family contacts, patience, a willingness to do work over which a superior has substantial control, and job longevity were considered more significant than education as variables associated with success.

That the values of the parents in the study, with regard to education, were linked to their work experience is also apparent in the parents' feelings about what ought to be taught in high schools. These parents consistently argued that schools should focus on technical training, basic skills, and the development of attitudes and behaviors functional to their world of work. Although some vocational students do go on to community, technical and even conventional four year colleges, these parents wanted their children to be prepared upon high school graduation to enter the world of "adult work and responsibility." They wished for their children the safety net of immediate employability as they faced the working class world the parents felt awaited them.

What these parents appeared to favor for their children was preparation in high school for the post-high school world of working class work and self-support. Development of the skills required to obtain and hold an entry-level, working class job was paramount in their thinking. Certainly, this high valuation of a technical or vocational orientation to high school, in combination with ambivalent feelings about college, represents an important component of the "frameworks" with which the students in the study entered their vocational program. There is substantial evidence that the students' vocational education choice was knowingly made in accordance with their parents' views on education, opportunity, and success. Most students reported parental encouragement

to enter the vocational program, and many students expressed work and educational values and beliefs similar to those of their parents. In addition, a large number of students in the study had older siblings or close relatives who had completed or were still involved in a vocational course. Almost half fell into this category, while six even had siblings or cousins who had completed or were currently enrolled in the food prep program. For many of these students vocational education was a family affair. Similarly, over half of the students in the study described as influential a parent or adult relative who was employed or had worked in food preparation (e.g. cooking, serving, waitressing, etc.).

That these students were predisposed at home to favor vocational education is clear, but there is more than family influence to understand here. Another important factor in the network of influence concerns the school performance of these students in the years before they decided to enter their vocational program. This performance was influenced by attitudes in the home, but, ultimately, due to conditions in the schools, it took on a personal and indelible significance of its own.

Like many vocational students elsewhere, these students did not do very well in the standard academic curriculum. Two probable home-related reasons are that there was often no precedent in the homes of these students for academic success and doing well in school was not highly valued in many of these homes. While most of the parents in the study hoped their children would do well in school, many were reported by their children not to have pushed very hard for such performance. In many cases the main advice from parents was to stay in school and graduate. "Getting by" and "getting through" were generally the central aspirations reported. A first year male student, whose parents had gone from maintenence and cashiering to factory work following high school, observed, for example:

> I used to be a real dummy, well not a dummy, but lazy. I never did my homework, and, well, I'm not great now, but at least I've started to do my homework. I mean, it used to be, like, I'd owe a hundred assignments within a month. I'd just go home, and I wouldn't do'em.

> They'd get sort of upset (his parents), but they didn't really push me. You know, I used to fail a lot of tests and never do my homework and they'd want me to pass. But that was about it - just getting my work done was the main thing.

And a first year female, whose parents run a diner, reported:

> My parents have just always said keep your grades up if you can. Make them passing. . . Everyday after school I go right up and work in my father's restaurant, and I have to do homework in between, and it's kind of hard to keep your average up like that.

The parents' behavior regarding the students' performance in their academic work thus reflected and reinforced a low valuation of pursuing work success through academic achievement. It may be that stressing academic success just did not seem very important when it was assumed the child would end up in working class work. It is also plausible that given the parents' own record with education and work, a child's disinterest or poor performance in school was not particularly unfamiliar or even unexpected. In fact, the success of a child in school might have been intimidating. In addition, there is evidence to suggest that these parents might have been afraid of alienating their children by demanding effort and sacrifice in a domain that often seemed unrewarding. The fact that many of these parents did not do very well or at least did not go very far in school themselves may have limited the confidence they could transmit to their children with regard to the pursuit of academic success.

Given this low valuation of traditional school success on the part of these parents, it is not surprising that many of these students disliked and did poorly in much of their academic coursework. These students generally seemed to share and act in accordance with the view that the academic curriculum was irrelevant for them. They often cited examples to support the belief that work experience was just as important, if not more, than success in school. They also described their high school classes, especially those required during freshman and sophomore years, as "boring and a waste of time." Many even indicated that their behavior in these classes had been disruptive, or at least "not serious," due to the classes' perceived lack of importance.

Thus, in apparent association with a low valuation of academic success, many of these students performed poorly in school. This, more than anything else, set the stage for the students' decision to enter vocational education. Almost 80% of the students in the study were placed in lower tracks and received three or more D's and/or F's in major required courses during their freshman and sophomore years. This experience served to reinforce for them the belief already prevalent in their home that academic success was not likely to be their most rewarding path to successful employment.

This academic failure carried with it considerable frustration and discomfort, especially as it sometimes came at the hands of seemingly unsympathetic teachers. The worst of their home school teachers were felt to be coercive and insensitive, both with regard to unsuccessful individuals and the lower track group as a whole. These teachers were accused of embarrassing less successful students by publicly displaying their errors, of failing to reward students' efforts, and of too often employing an authoritarian lecture and worksheet format. Many of the students grew to dislike their academic classes intensely. For example, a female first year student explained:

> I'm not fond of (regular) school. I don't do good in school, and that's why I don't like it. Even though you try, you don't get any credit for it. Like, you might try hard and not do that good. All they do is come down hard on you, just because of that. How hard you try doesn't mean anything. And all they give you is straight books. Read this, do that. I don't learn nothing in a class like that.

And, a young man, also a first year student said:

> I hate my high school. It's strict, and I haven't done too good. I've got an English teacher who won't let you make up homework. This guy is, like, if you write a letter he'll make you do it over five times before your final draft if it's not right. And then he'll show it up on the wall, sometimes. He puts it on the overhead projector to show what mistakes not to make, and he embarasses you.

It is understandable, then, that when presented with the vocational education alternative these students found it attractive. The vocational education option fit both their own beliefs and those of their parents regarding how best to pursue success. It also promised relief from the drudgery and failure experienced in academic classes. In

addition, it represented attainable credits where lost credits were needed for graduation, and it offered free training where the same training might be expensive later. Both the students and their parents felt high school vocational education was a "good buy."

But, this is not the whole of it. Also instrumental in many students' decision to become a vocational student were the negative self-images and social relations they had experienced in interactions with their home school peers. Many of the vocational students saw themselves as living a life in negative contrast to "the higher class kids." Higher class students were often described as some combination of academically successful, socially popular, financially prosperous, and physically attractive. Reports of negative, social-class-related segregation in the schools were common. An overweight young woman with a very poor academic record, whose mother was a cafeteria server and whose father worked in a factory, described the pain of her school failure in terms of these negative class relations.

Student - Sometimes it feels like you can't do nothing (in the home school) without getting hollered at.

Interviewer - What do you mean, "get hollered at?"

Student - Well, you know, if you don't do too good, the teachers let you know. It doesn't feel too good to fail.

Interviewer - How does it feel when you fail in your school?

Student - Well, you have your different groups and like, some are the ones that are pretty and high class. They think, well, they look down on the ones that are low class and aren't like, skinny or as popular or as good in school as they are.

Interviewer - Is there tension between these groups?

Student - I think there is. When they treat me bad I treat them bad.

Another student, a first year male who was a senior and a married parent, put it this way:

Interviewer - Do the students at your school get along with each other?

Student - Umm, I'd say some people definitely get on each others' nerves.

Interviewer - What do you mean?

Student - Well, ther're different groups, like higher class kids and lower class kids, and they don't always get along.

Interviewer - What's that like? What do you mean?

Student - Mmm, I don't know. They don't really hang together. I guess you hang with people you belong with, and I don't belong with any higher class group. I get along better with the lower class than with the higher class people.

Interviewer - Why's that do you think?

Student - I don't know, that's how I grew up I guess. No money, not too good in school. I really don't like school. Most people stick with the people they've known for a long time, I guess, like I've known Donald for years (Another one of the food prep students, Donald is black and lives in the "black section" of his town).

Interviewer - Do you live near him?

Student - Yeh, I lived down the street from him for a long time. My father and his older brother hang out.

Interviewer - What do you mean by a higher class group?

Student - People with money. People who don't know the word welfare. People who never heard or had to deal with that. You know, you're afraid to even mention that your parents have been on welfare and stuff, people like that.

And, finally, a young woman from a rural school, whose father is a car mechanic at a local garage, observed:

Student - One thing I don't like (about my high school) and that's when people are snotty.

Interviewer - Does that happen often?

Student - Well, its just, we've got our high stuck-up class.

Interviewer - Who are they?

Student - Well, they've got the highest grades you know, and probably more money, and they don't hang around with other people that's not up with them. They think they're better, you know, they just act snotty towards you if you don't do as well or don't act like them.

And so, for many of the students in the study, especially those of working and lower class backgrounds who had not done well in school and who did not possess the financial or social capital required to be a part of the upper class social groups, the home schools were socially as well as academically alienating places. Differences drawn along social, economic and academic performance lines often operated at the expense of the self-images of these students and became an aggravatingly accepted part of their school lives. By the end of their sophomore year, when the vocational education decision was made, these students were well aware of their position in the social relations of their schools, and they disliked it. As a result, when these students chose vocational education they viewed it not only as a job-practical option but also as a potential respite from the constant reminders that they were not as fortunate or successful in school as many of their peers. Vocational education looked, as one student put it, like an opportunity to "start fresh and build a new image." In this way many of the students in the study entered the food prep program with a favorable predisposition toward vocational education. It represented an opportunity to get away from the social and academic failure they had experienced in their home schools, and it was consistent with the education and work-related beliefs and experiences of their families and friends.

Observation of the Food Prep Program

Central to this study are observations that were conducted during the first semester of the first and second year classes in the food prep program. It was in the interactions and events of these classes that detailed explanations emerged for the association between participation in vocational education and reports of improved attitudes. It was also in these classrooms that the developmental significance of these reports and their origins was revealed.

The First Year The first year of the food prep course was given to a great deal of "classroom learning" involving a combination of lectures, textbook assignments, demonstrations, and hands-on labs. The expressed purpose of the first year, from the

perspective of the teacher, was "to establish a social, technical-skill and general knowledge base for the second year of the course," which consisted entirely of having students plan and prepare the meals for the lunchroom cafeteria serving the vocational school's faculty and staff. This progression, from a classroom-like format to work experience, is a common one in vocational education.

On the basis of certain assumptions about and in response to the behavior of these new students, the teacher (who I will call Mrs. Carter) worked hard during the first semester to establish social and academic ground rules within a framework of success, sensitivity, and opportunity. In turn, the students pushed and manipulated to establish their preferred styles of learning and going to school. In this interaction, this push and pull on the part of both the teacher and the students, the students learned much about what was allowed, promised, and expected of them by vocational education.

During the early days of the semester the new students consistently voiced two concerns: Would they get to do a lot of "real cooking" in this class, and would this program really help them get a job? In response, Mrs. Carter answered directly, saying that yes, they would do a fair amount of cooking, although not as much as in the second year of the program when that would be their primary activity, and yes, it should help them get a job, because 90% of those graduates during the previous three years who had wanted to work had found jobs their first year out of school. Mrs. Carter also took great care to express the course format, various rules, and much of the course instruction in terms of career relevance. The more classroom-like structure of the first year was rationalized, for example, as a skill and knowledge prerequisite for both the hands-on work activity of the second year and a broad range of employment probabilities within the food business. Stated bans on horseplay and gum chewing were discussed, respectively, in terms of job safety and professional manners. And, one of the most important regulations, that concerning attendance and the small number of acceptable absences, was explained in terms of its relevance to employability. Both Mrs. Carter and an

administration pamphlet stressed that a good attendance record would indicate reliability as well as a more complete skill training to an employer. Mrs. Carter also told the students repeatedly that potential employers often called her to ask about recent graduates applying for a job, or to find out if she knew of any "good students" looking for work. This, too, was presented as a reason for "responsible, work-like" behavior in class.

Similarly, Mrs. Carter explained a number of her other practices and concerns as a function of her desire to promote job realism in the class, especially as this pertained to the notion of working for someone else and getting along with others. In supporting her preference for assigned rather than student-selected work groups, for example, she observed, "A boss won't ask you who you would like to work with today, will he? No, he'll assign a group. I also like you to meet other people." And, when discussing assembly-line efficiency in the preparation of certain items, the use of standardized portions and measures, and injuries due to safety infractions, Mrs. Carter alluded to the students' eventual responsibility to an employer's profit margin, emphasizing that employees who respect and contribute to their employer's profits are the workers with the best chance of holding their jobs and receiving good recommendations when they leave. Above all else she stressed cooperation and self-discipline as the means to success, both in the class and in the workplace.

Thus, in the interest of control and motivation, the new students were consistently presented with evidence that the course they had chosen possessed career relevance. Even their mid-class breaks were characterized as "similar to industrial coffee breaks." Although many of these students did not necessarily enjoy the idea of bookwork and new rules, most were excited and motivated by this notion of job realism in the classroom. While some quietly accepted and others constantly tested the limits of the classroom, most reported that the course felt "more like real work." This was consistent with their view of the ideal education. It also bolstered their confidence with regard to achieving work success. It was in this way, then, that many new students began to develop "career confidence" and a positive attitude toward their program.

The students also discovered rather quickly that Mrs. Carter was not a rigid enforcer of rules and that the bookwork was not as threatening or as unforgivingly taught as in many of their home school courses. A number of the students, especially certain males, tested early Mrs. Carter's limits, both with regard to acceptable behavior in class and the academic requirements of the course. In the process, the rest of the class learned these limits too.

Many of the students were disinterested in and intimidated by the bookwork component of the class. They had come to vocational education to get away from bookwork, operating on the assumption that hands - on learning was the best kind of education for them. They also knew they had to pass the first year of the course in order to enter the second, and were afraid that the written exams and assignments of the first year might keep them from the extensive work-like experience of the second. This fear and disinterest surfaced in a number of ways, the most apparent of which involved many missed assignment deadlines and excuses, a substantial amount of expressed test anxiety, and a certain amount of absence on test days. Mrs. Carter was sensitive to these concerns. First of all, in repeated discussions of the course requirements, she emphasized that "effort and a good attitude," precisely those qualities many of these students felt were too infrequently rewarded in their home schools, were worth a great deal in this class. She stressed that while one-third of their grade was based on written work and exams, another third was based on their lab work-habits and the final third determined by general effort and deportment. This meant that two-thirds of their grade was linked to attitude and effort. As Mrs. Carter noted often during the early weeks of the semester, "If you try in this class you ought to do just fine."

Mrs. Carter was also understanding and lenient with regard to deadlines. In the interest of building success experiences and a positive student-teacher relationship, she generally did not penalize students if assignments were handed in late. Although she never stated this explicitly to the class, a few people and eventually the entire class

figured this out through experience or observation. She also tried to allow students time in class to do many of their assignments and monitored homework records and return rates closely without being threatening or insensitive. Mrs. Carter politely and individually reminded those students with a tendency toward late homework where they stood regarding completion of the required work. In addition, during discussions with students about their excuses and concerns, Mrs. Carter was often able to elicit and express a personal interest in bits of information about the students' lives outside of school.

In response to test anxieties and absences, the former of which were commonly expressed in verbally disruptive ways during lectures or study periods, Mrs. Carter was, again, sympathetic and accommodating. Regardless of the timing, she responded readily and fully to questions concerning what information might be covered on a test. She also held thorough review sessions before tests, sometimes providing a set of questions and answers from which the test items were then taken. And, she willingly gave make up exams. She even announced, "If any of you have trouble taking quizzes or tests, please talk to me. We can usually work something out."

Thus, as various students tested and questioned the academic requirements of the course, Mrs. Carter responded with patience, compassion, and lenience in the interest of promoting a sense of good will and support. With such an approach Mrs. Carter was successful. Most students passed and some, despite disliking the bookwork intensely, learned to handle it as a required part of their program. The bookwork became a manageable prerequisite to something they wanted.

Mrs. Carter's reactions to non-academic disruption and informal social interaction in the classroom were similar, in both motivation and results, to her response to the students' challenges regarding bookwork. As with almost all of the students in the study, the first year students entered vocational education in search of and expecting a more socially relaxed and entertaining classroom than the ones they had experienced in their home schools. As a result, many of these students, at least initially, acted in accordance

with this expectation of freedom while waiting to see what the regulations and limits of the new setting would be. The field notes provide numerous and consistent examples of students talking, laughing and wisecracking during lectures and demonstrations. They also show a great deal of " horseplay" during the student-performed labs.

For lectures students sat at long tables next to their friends, which made socializing easy, if not almost unavoidable, and during teacher demonstrations, which took place in the lab kitchen section of the classroom, students had considerable physical freedom and opportunity to interact as they were told to sit on nearby countertops and tables. Students liked this aspect of the class. They spent a great deal of time in informal social interaction. During lectures there always seemed at least a few who talked among themselves or who commented humorously on the material. During demonstrations the tendency increased, as at least a few students could always get out of the sightline of Mrs. Carter. And, during labs, when everyone was working in a relatively small space and Mrs. Carter often had to leave the room to get supplies, the capacity for high jinks reached its peak.

Mrs. Carter's usual response to this behavior was to ignore such interaction until it threatened to interrupt her concentration or the entire class. At this point, depending on the time of day, the activity underway, and the activities remaining, she often attempted to defuse the rising disruption by holding out a reward for good behavior. Sometimes, for example, she discussed the independence she gave and expected of students during the second year of the course, noting that she wanted to be able to trust the first year students with freedom and responsibility also, but was not yet comfortable with the idea, given their present behavior. This often worked, as the first year students had numerous opportunities to see the lunch room cafeteria in operation and to them it looked "real and fun." Other times Mrs. Carter held out a more concrete reward, such as the promise of giving them their break before its scheduled time. And, in certain more extreme cases, she simply moved on to another activity. When the students became really restless in

their seats, for example, she sometimes cut things short and moved right into a lab, where the students were very active, or she gave the students their break right then. Sometimes, however, the disruption reached Mrs. Carter's threshold. On these occasions she generally reprimanded firmly, although calmly, by stressing personal responsibility and self-discipline as virtues and by offering offenders the option of moving to another seat. This latter technique tended to focus blame on the situation and not the individual, although no one ever chose to move on their own.

Toward the end of the first month Mrs. Carter finally "blew up" one day when the talking had been unusually disruptive and persistent. In a rare display of anger she changed a number of students' seats permanently and "lectured" the class on too much talking. Later in the semester, in a similar situation, she explained to the class the difficulty of accomodating such a large class in the second year of the course, implying that she might have to eliminate a few students for the second year. "In spite of how I'd hate to do that," she said, "you might want to think about that while you're talking."

Thus, Mrs. Carter maintained order by holding out the carrots of work experience and independence and by allowing students a significant amount of the informal social interaction they seemed to demand. In this way she achieved a reasonable degree of student success (e.g. lower than average attrition and failure rates) without eliminating the potential for a thoughtful and caring student-teacher relationship, something many of these student had found lacking in their home schools. Almost all of the first year students liked Mrs. Carter a great deal, appreciating her patience and understanding on their behalf.

It should also be noted that Mrs. Carter contributed to order and control, as well as to a positive student-teacher relationship and student self-confidence by praising individual students, whenever the opportunity arose, and by limiting the potential in class for competition and publicly embarrassing error or failure. Many different students were praised openly in class, for everything except success in their bookwork, which usually

received a more private congratulation. If a student helped clean up, produced a successful food item in lab, or related a relevant experience or anecdote in class Ms. Carter was sure to use the opportunity to spread the reward of her approval and attention. This helped develop student self-esteem, and it fostered greater attempts on the part of some of the students to produce praiseworthy behavior.

In addition, Mrs. Carter structured class activity in such a way that public embarrassment over individual error was rare. In the labs, for example, which had a great capacity for visibile and public failure, Mrs. Carter generally controlled quite closely what dishes students would prepare, even when there appeared to be some choice, and she always had students work in groups. The group nature of the labs had the double-edged effect of allowing students either to adopt a success as their own or to attribute a product failure to the group. I often heard students say, "Look what I did," while proudly pointing to the group product. Likewise, when one student kidded another about bread that had failed to rise, the student being kidded responded while laughing and pointing at other members of his group, "It wasn't my fault. They blew it." Also, Mrs. Carter was quick to remind the students that lab products were not graded and that mistakes were an expected and desirable part of the learning process.

Thus, in the interest of order and student self-esteem, Mrs. Carter not only promoted a positive student-teacher relationship, but she worked to limit the threat of failure and to establish positive peer relations among the students as well. For Mrs. Carter positive student relations were very important. Such relations contributed to order in the classroom, the development of work-related skills (e.g. getting along with "fellow workers"), and the creation of a "safe" environment for less successful students.

By the end of the semester most of the first year students felt the peer relations in their class were better than in their home schools, although many thought so for reasons somewhat different from those underlying Mrs. Carter's push for positive peer interaction. During the first few weeks students grouped themselves for lecture, demonstrations and

labs pretty much according to gender and their home schools. This seemed to ease the social discomfort and uncertainty of being in a class with "a lot of strangers from other schools." Contrary to her stated preference, Mrs. Carter often let students choose their own work groups for labs. She did this because the students greatly preferred working with friends. The pattern changed somewhat over the period of the semester, although a number of gender and home school relationships did persist. Through interactions during breaks and in teacher-assigned work groups, students located potential friends from other home schools, and new bonds of friendship developed. By the end of the semester almost every student had made a few new friends, and all but one of the original social groups (of which there had been seven) had changed.

In addition to the gender factor these new bonds seemed rooted in a number of often overlapping commonalities. There were similar behaviorial tendencies (e.g. from attention-seeking extroversion to quiet subservience), common experience outside of school (e.g. after-school jobs in fast food restaurants, parents and siblings with working class jobs of local familiarity), shared views and experiences regarding school (e.g. a "devil-may-care" attitude toward a poor school record, an interest in passing in the home school and learning a trade in the food prep course, a severe inability to handle conventional schoolwork but a polite willingness to follow directions and do manual work), and physical attractiveness in terms of male-female interaction (e.g. from attractive, socially active males and females interested in flirting to shy, overweight young women). There were three males, for example, who shared: a tendency toward showing off, an unwillingness to pursue seriously much of the bookwork, considerable work experience and independence outside of school, very poor school records both in terms of grades and behavior, and a physical and degrading view of women. Although Mrs. Carter often kept them separated they tended to like each other and seek each other out. Along with two "followers" they possessed a strong esprit de corps and represented a major source of classroom disruption.

Another group, usually consisting of two males and three females, cut across three home schools and seemed rooted in an interest in male-female interaction and the objective of having as much school-irrelevant fun as possible without compromising a good record in the class. They were all of conventional working class backgrounds and were "getting by" academically in their home schools while maintaining an active social life. This group did not find the bookwork very difficult, and they wanted and knew how to avoid detection with regard to their socializing and antics in class. Thus, they could convince Mrs. Carter that they were studying together during study periods when, in fact, they were talking about school, cars, jobs, home schools, etc. and tickling each other or sitting with their legs up on one another's knees under the table.

Such friendships contributed greatly to the first year students' generally positive feelings about the course and their classmates. Even though there were, occasionally, antagonistic interactions in class, these small-group friendships and the various characteristics shared by many of the students, served to give students a sense of belonging. The distinction between upper and lower class groups mentioned by students in their discussions of their home schools, for example, was not apparent. There were no upper class students in the class. Or, as one student put it, "I like it here. It's more of the lower class kids, and I like that." Also, cutting across home school divisions, the small group friendships that developed provided an in-class forum for play and the discussion of shared views and experiences. For many it seemed the stigma often associated with vocational education was muted as they discovered both that others had come to vocational education for similar reasons and that there were numerous opportunities to have fun with their classmates.

Thus, during the first semester of the first year the new food prep students both learned a great deal about what was expected of them in vocational education and manipulated the teacher and environment, as best they could, to fit their view of a meaningful and tolerable school experience. In the process many students grew to like the

course and its potential. The students were reassured that their vocational education would be career relevant, especially if they adhered to school and class regulations and displayed cooperative work attitudes. And, they learned that in the food prep course they were somewhat sheltered from failure as the learning, testing, and grading methods employed were neither competitive nor rigidly threatening. In addition, these students found friendship and fun rooted in common backgrounds, attitudes, and experiences regarding school. It is not surprising, then, that many of these students felt good about the course and their participation in it. It seemed to accommodate well a variety of goals, from wanting "to get out of the home school and goof off" to "learning a trade," and it looked to be a career relevant haven from the boredom and failure many of these students had experienced in their home schools.

The Second Year Much of what transpired in the first semester of the first year seems, in retrospect, a foreshadowing of what occurred in the second year class. Second year students more explicitly than the first year students were given hands-on proof that the course was career relevant. They were also allowed the freedom of a relaxed social environment and were sheltered from the threat of failure. In association with their similar backgrounds, prior school experiences, and views regarding desirable schooling, the second year students responded positively to their program, teachers, and classmates and in the process grew to feel better about themselves. Sadly, however, much of this positive feeling was associated with conditions which had the developmental effect of reinforcing tendencies toward attitudes and behaviors primarily associated with and limited to working class employment.

The students who entered the second year of the course were those who had completed the first year successfully, both in academic and behavioral terms. A few students (3) who had been with this class during their first year were no longer in the course, either because they had failed the bookwork in the first year or because they had dropped out of the class as a result of personal problems. This meant that by the second

year of the program most of the students involved had already adjusted and made something of a committment to vocational education and the food prep course and its participants. This is not to say that all of the second year food prep students were dedicated to working hard in class and pursuing a career in the food business. Many still saw the class primarily as a way to get out of their home schools and avoid regular classes. Neither is it to say that all of these students were without personal animosities or antagomisms. Nevertheless, there was a sense, on the part of Mrs. Carter and many of the students, that most of the "worst students and troublemakers" were no longer in the program.

This contributed right from the start to a positive class or group spirit. There was the shared experience of having been through the first year of the course together, and there was the perception that the remaining students were basically interested in cooperating with Mrs. Carter and getting along with each other, in the interest of learning a trade and having fun away from school. For Mrs. Carter this allowed a release from certain undesirable disciplinary responsibilities, and for most of the students it meant a fun and supportive environment rooted in their shared understanding of how to achieve maximum fun within the limits presented by the material of the course and Mrs. Carter's teaching style.

In the second year class Mrs. Carter was better able to develop the personal and relaxed relationships with her students she felt they needed and deserved. (If lunch room conversations are an indication this is a sentiment and practice common to many vocational school teachers). In general, Mrs. Carter was sympathetic, lenient, helpful, and easygoing. She listened patiently to and took a serious interest in students' discussions of their lives outside of class. In some cases she even became actively involved beyond the classroom. She was also sensitive to the students' general distaste for written work and to the vocational education promise of work experience. As a result, she kept written work to a minimum during the second year and was always flexible and

undemanding with regard to deadlines. In addition, she and her teacher's aide for the second year class (who I will call Mrs. Lynd) were always willing to sit down with a student to work through specific assignments and problems.

The first month of the class was spent in cleaning the kitchen and dining room, demonstrating the use of kitchen equipment, describing the various work stations and duties, and going to area restaurants on field trips. By the end of the month most students were excited about the career relevance of the training they were receiving and the "real experience" they were about to get, as the dining room opened for business. Many also remarked, "This sure beats school."

At the end of the first month the second year students began preparing the meals for the dining room. Once this became their primary activity, they were given a great deal of physical freedom, relative to a conventional classroom regimentation. Even the first fifteen minutes of the class, when students sat at the dining room tables for attendance and announcements, there was often an atmosphere of talking and coming and going. After this period each day the students pursued their daily work assignments in the kitchen, sometimes with little apparent supervision, depending on the job and its requirements.

A schedule of weekly rotating assignments to different kitchen positions had been made by Mrs. Carter at the beginning of the year. Students worked on salads or set up the menu board and dining room tables or baked breads and desserts or prepared the main, usually hot, dishes or planned the menu and oversaw all kitchen preparations or washed dishes, etc., with all of their duties clearly outlined by Mrs. Carter. The work load was rarely extreme as it almost never required a student to work hard and fast all morning. For the most part, students had a lot of time between, during, and after work tasks for conversation, watching others work, and relaxation. They tasted each other's foods during preparation, and they moved about freely, kidding and talking with each other.

While the students were working Mrs. Carter generally either worked on paper work in her office, talked with salespeople, or floated from area to area and student to student in a benign system of reminding, problem solving, and demonstration as students asked for or seemed to need help. One of her major activities was reminding students of what they were supposed to do. She always tried to stay ahead of students in order to prevent mistakes. Mrs. Carter's aide, Mrs. Lynd, was always stationed in the "hot foods area" of the kitchen, where the main dishes of the day were prepared. Here she supervised and worked along with the four different students assigned to that area each week. She also responded to questions from students working in other areas of the kitchen. Thus, both teachers were almost always available if help was needed, and Mrs. Lynd was right in the center of the kitchen working along with the students.

How Mrs. Carter and Mrs. Lynd guided the class and helped students with decisions and problems is very revealing. Neither Mrs. Carter nor Mrs. Lynd was a stern disciplinarian or critic. Both were willing to participate occasionally in student humor and both tolerated a great deal of safe horseplay and verbal interaction as long as the work got done. This was felt to be an effective and humane response to the experiences, desires, and behavioral tendencies of the students involved. In addition, both teachers were always willing to provide non-judgmental help in performing a task or figuring something out. As a result, there were more than a few students who said these were the nicest and best teachers they had ever had.

Part of this sentiment, however, was based on the fact that when asked for help both teachers tended to shield students from potential error or failure. They tended to do things <u>for</u> students a lot of the time, rather than helping students learn to work things out and make decisions themselves. This not only had the effect of limiting the learning potential of the experience, especially with regard to the development of problem-solving and decision-making skills, but it relieved the students of responsibility for their previous work on that product. If the item failed, the blame could be placed with either Mrs.

Carter or Mrs. Lynd. Thus, as the teachers tried to lower the potential for disruption, born of anxiety and frustration, and to protect students from the burden of failure (to which these students were quite sensitive due to their prior school experiences), they not only missed many opportunities to teach skills vital to upward mobility in the world of work, but they encouraged a dependence on others, especially those in charge, in situations requiring decision-making. Students quickly figured out that when they were faced with uncertainty and insecurity in a task they could turn to either Mrs. Carter or Mrs. Lynd for the solution.

Examples along these lines are numerous, both in the field notes and interviews. Most explicitly, I asked one young woman, who was considered an above average student, "When you're working in class and you're not sure how to do something, what do you usually do?" She responded, "We just ask Mrs. L and she'll usually do it for us or tell us what to do." The field notes support her view. For example:

> Bill puts the wrong beater on the mixer, in making cake icing, and, as a result, the mixer won't fit down into the bowl all the way. He tries it a couple of times and, seeing that it isn't working properly, asks Mrs. C to come over. She comes over and Bill shows her the problem. She looks at the set up and realizes right away what the cause is. She says, "you've got the wrong sized beater," and removes it from the mixer. Then she gets the right beater out of a nearby drawer, puts it in the mixer,and while turning it on says, "There, that ought to work."

> Mrs. L. is helping Carol make instant mashed potatoes which will be used in a potato dish. Carol has the box and holding it out asks, "How should I make these?" Mrs. L. takes the box and, after reading Carol's recipe on the side of the box, gets out the proper bowl and tells Carol how many cups of potato flakes and hot water to put in the bowl and mix together with a power mixer . . . At the end of class I ask Carol how the potato dish turned out. She says, "Pretty good, I guess. I could've made the servings a little bigger but nobody told me."

> Mrs. C. passes the stove and sees peppers and onions near the stove and stir fry vegetables ready to be cooked. She asks today's "head cook," Karen, "Hey, how are we going to do these onions and peppers at the same time as the stir fry? We only have this one big frying pan." Karen says, "I don't know. I guess I should hurry with the stir fry." Mrs. C. then checks the stir fry recipe and decides and says that the peppers

and onions should be done first. She says, "we can let these sit awhile once they're cooked. Then we'll have time and room for the stir fry." Mrs. C. then puts on the peppers and onions and fries them for awhile before turning the task over to Bobbi, who is an assistant cook this week.

Jon asks Mrs. L. to come over and taste his deviled egg mixture. "Is it ok?" he asks. She tastes it and says it's good, but asks if he put any horseradish in it. He says no. She goes to get a jar of horseradish and says, "It will be great with a tablespoon of horseradish." This Jon adds to the mixture.

Mrs. C. peels carrots for tomorrow's beef stew. Doreen is browning stew beef. She puts the beef in the pan and asks Mrs. C. "How's this?" Mrs. C. sees the beef in the pan and says, "Doreen, you can't do that much beef all at once, it'll burn." Mrs. C. removes the desired amount of beef with her hands. Then she tells Doreen to go to the dishroom to get a large stew pot, which she does. Putting the pot on the stove Mrs. C. tells Doreen to put a quart of water in it and bring it to a boil.

Dan is making gravy with a mix. He gets the ingredients out of the stockroom and a pot and a wisk from the rack. He reads his recipe card and the gravy mix label for awhile. Finally he asks Mrs. L. what to do, saying, "I've got to expand this recipe and I'm not too sure." She comes around the table, and he hands her the recipe card and the jar of mix. She reads them and after a pause proceeds to tell him what quantities of the mix and water to put together. This he does.

Kent asks Mrs. C. how big the drop of cookie batter should be on the cookie sheet. She says, "Well, they'll be going on a small dessert plate." Then she asks Mrs. L. if she remembers how big these cookies come out. Mrs. L. doesn't remember but tells Kent that the oven ought to be on. Mrs. C. finally suggests baking a test dough lump in a small pan to see how big it gets. This he does. Later he shows the test to Mrs. C. and asks, "How's this?" She suggests making them just a little bit bigger, which he does.

Thus, many students learned to avoid personal responsibility when faced with a problem-solving challenge and the ensuing insecurity. Afraid of making an error in judgment or practice they often turned the task over to the teachers, knowing the teachers would probably relieve them of their perceived burden.

A similar student-teacher interaction was apparent during some of the students' week long tenures as student manager. Here it was particularly salient, because this was a special role in which students were supposed to have an opportunity to experience the challenge and thrill of a position generally associated with work success. The duties of the manager included preparing a five day lunch menu for the week managed (this was done during an otherwise free week, two weeks before managing), preparing recipe cards from books and files for each item on the menu (this was done the week before managing and sometimes included expanding recipes), completing a cost accounting of one meal, overseeing and troubleshooting the preparation of all meals during the week, and writing up an evaluation for each student worker. The stated responsibilities, however, were often greater than the actual ones. There was little requirement to "take charge", if students did not want to, and certain of the more significant tasks often associated with real managing, such as talking to salespeople, making purchasing decisions, and worrying about profit margins, were not part of the manager's duties.

Many students disliked the paperwork part of managing. Many were also uncomfortable in the position of supervising the work of their peers. These students consistently turned to Mrs. Carter and Mrs. Lynd for relief in these areas, often finding that the teachers were willing to relieve them of a substantial share of their reponsibilities. In two instances I observed Mrs. Lynd, upon student questioning, suggest items for almost the entire menu of students quite capable of the work themselves. And, Mrs. Carter reviewed each manager's planned menu, at which time she often suggested significant changes, which were then readily adopted by the students with little understanding or discussion of their function or purpose. In addition, Mrs. Carter and Mrs. Lynd remained the key supervisors in the kitchen, so it was not uncommon for some managers to feel, as one student did, that "the week you manage is about the easiest one there is. You just really don't halfta do very much. Everybody takes care of themselves, and when they don't know what to do they ask Mrs. L or Mrs. C. I just sort of hung around and tasted food a lot."

But the position of manager was publicly revered and praised by Mrs. Carter and Mrs. Lynd, so students generally came away from the experience feeling good about themselves. The manager's were allowed to stay at the vocational center one entire day, eating a free lunch and getting out of school; their names were posted on the menu board throughout the week; and their parents or guardians and relatives were invited for a free lunch and received preferential treatment if they came. There were, of course, a number of students who worked creatively toward and during the manager's week, learning a great deal on their own about menu planning, food preparation and supervising others in the process. These students received deservedly substantial praise. By and large, however, students handled the role passively and still received confidence-boosting compliments. Rather than learning management-oriented skills they all too often learned how to avoid or buffer the challenge.

Another way in which many students achieved shelter from the threat of decision-making and potential errors was by getting <u>friends</u> to do things for them. The second year students generally got along well together and were willing to help each other out if time and circumstancce permitted. On one level this seemed the foundation of productive, cooperative work relations. On another, however, it often meant a student could and would avoid problem-solving and learning while hiding this avoidance from the teachers. One student, for example, did not do his own menu, recipe cards, or cost accounting sheet when he was manager. Instead, he got a female student, with whom he was not even all that friendly, to do all three for him during her free time. She often did her kitchen assignments quickly and half-heartedly, then avoided additional, spontaneous assignments by moving around the kitchen and dining room in such a way that she stayed out of the teachers' paths. This was her way of manipulating the course to her own ends.

Another not uncommon occurence is illustrated in the following field entry:

> Jane is working in the baking area preparing an almond pastry ring. She has already baked it and now has to cut it across, in half, so as to produce top and bottom layers to the ring. She puts the knife up to the side of the ring but is afraid to make the cut. After fumbling some

> with the ring and other possible approaches with the knife she asks Bill, who is working in the nearby salads area, if he will cut it for her. He says, "Yeah, sure" and proceeds to make an adequate although not really smooth cut with no hesitation. Jane, having gone off to get a utensil for spreading the filling, returns to the now cut pastry and thanks Bill. ... Later, Mrs. Carter comes by and says to Jane that it looks nice. She then asks Jane how it went. Jane tells her everything has gone smoothly, and Mrs. Carter reiterates how nice it looks.

And so, classmates as well as teachers represented an important resource as students faced and often tried to avoid difficult tasks. Classmates were especially important in this regard when students wished to avoid the notice or perusal of their teachers.

Peer interaction was also used by the second year students to mitigate various other pressures and to relieve the potential boredom of free time. In the process, the students' negative attitudes toward conventional schooling and their views regarding work and the makeup of society were often reinforced. As already noted, many of these students were not very successful in their home school classes and came from backgrounds where school was considered less important than work experience. As a result, there was a great deal of support among the students for not taking home school classes seriously. Easy schedules, skipped classes, missed deadlines, assignments done the last minute with little regard for quality, and subversive tactics in classes with teachers whose techniques were considered unfair or overly demanding, were common topics of conversation and were generally discussed with humor and bravado. When told by Mrs. Lynd that they would have to miss their half day at the home school due to a food prep field trip, for example, one student said sarcastically, "Oh I can't do that, I'll miss gym, and that's my ten credits for the day." This produced broad laughter from both the students and the teachers.

Similarly, many students filled their work and free time with discussions and expressions of an irreverant student culture and ideas about restaurants and work. Throughout the semester students boastfully described midweek and weekend parties involving drinking and marijuana smoking. Partying, drinking, working on beat up cars, illicit cigarette smoking, humorous and ribald gossip about male-female relationships, and misbehaviors on the bus ride to the vocational facility were the mainstay topics of

entertainment-oriented conversation. More serious discussions often revolved around work-related hopes and values. A number of students made no pretense about not being interested in pursuing employment in the food business. For these students the course was a means to get out of high school and to develop a safety-net credential they could "fall back on" if other things did not work out. Most of these students intended to continue after high school in jobs they already held (e.g. maintenance worker for an apartment complex, service station attendant, plumber's apprentice). This was a well-tolerated view in the class, although many others aspired to employment and possibly additional schooling in the food prep field with hopes of someday owning or managing a small restaurant. Most, although not all, of these students, shared a vision of the restaurant they would like to run. It was a "simple, diner-like place for regular people," a place of affordable, functional meals and modest decor. Or, as one student put it, "Not a fancy place. I don't like fancy people."

Interestingly, the two students in the class from obviously upper-middle class backgrounds wanted something different. Both had come to vocational education primarily as a result of poor high school records, not because of a high valuation of work experience or a desire to achieve financial security through working class work. In apparent association with their backgrounds they both intended to pursue "serious" additional schooling in management and cooking. They used the word "chef" rather than "cook" and often talked about owning a "nice" place when they discussed their plans for the future. Nevertheless, the core dreams and sentiments voiced and reinforced in peer interactions during the second year of the program seemed to revolve around a counter-school culture and working class work, people, and environments.

Thus, during the second year of the program many students <u>did</u> develop a more positive attitude toward themselves and their vocational program and classmates. The structure of the course, the teachers, and the students all interacted to mute the threat of problem-solving tasks and failure and to promote confidence in the career relevance of

the training and its credential. This interaction also produced a greater sense, on the part of the students, of belonging to a meaningful and acceptable group. But, at the same time, the students' tendency toward working class values, aspirations and skill-limitations was reinforced. In interactions with their teachers and classmates students often resisted and learned how to avoid the responsibility and challenge of problem-solving and decision-making. They also found a receptive forum for expressions of their counter-school culture. In addition, they were generally trained in specialized, rote-like work, often being left unaware of the whole into which their work fit, and they developed few, if any, real management-like skills. Thus, while the students registered a positive opinion of their vocational education experience they also revealed a growing acceptance of their working and lower-middle class positions and developed habits, attitudes, and skills which limited their chances to compete successfully for significant advancement in the world of education and work.

Conclusion

The field data suggest that the improved attitudes many vocational students report reflect the development of neither a strict compliance nor an opportunity-enhancing resourcefulness. Instead, it appears that the students observed experienced in their program a sense of relief and belonging, born, at least in part, of support for their disinterest in conventional schooling and a broad acceptance of avoiding responsibility in situations involving problem solving and the threat of error. Many of the students entered the program seeking a viable alternative to the failure they had experienced in their home schools. Their academic records were below average, their self-images and peer experiences in the home schools were often not very positive (many were in the lowest tracks), and their relationships with their home school teachers were often strained. In combination with a tendency in their families toward working and lower class occupations, limited financial resources, and a belief that semi-skilled or trade-oriented jobs and training afford people like themselves the lowest risk means to job security and financial

stability, such factors appeared to make these students particularly receptive to a program which: 1) promised to educate them for direct entry into the world of semi-skilled work, 2) brought together working and lower class students who shared a first-hand sensitivity to the negative aspects of the conventional high school, and 3) which relaxed the behavioral and performance standards by which the students were judged. It is not surprising that the students liked and reported improved attitudes as a result of the program. The program was consistent with the students' views concerning opportunity and success, and it allowed the students to alter many of the reference points by which negative self-assessments had previously been made.

Such attitudinal change has its obvious and prima facie virtues. It is at least an indication that the alienation and rejection many of these students had experienced in their previous schooling was tempered by a humane experience in a public institution. Nevertheless, the developmental consequences of participating in this vocational program were not as positive as many vocational educators would like to suggest. That the students liked their program is, in the final analysis, not enough.

Many of the program factors the students cited as responsible for their improved attitudes have questionable developmental effects. What students reported as positive student-teacher relationships, for example, were often rooted in a pattern of interaction in which the teachers allowed students to avoid the personal challenge of difficult problems or tasks. Where decision making skills and "learning to learn" might have been encouraged, things were often done for students in the name of compassion and removing the threat of failure from the vocational classroom. Additionally, what these students described as positive relations with their vocational classmates were generally grounded in the homogeneity of the students' background and prior negative school experiences. While this homogeneity provided a respite from the negative academic and social competition of the home schools, it also reinforced a counter-school culture and a working class view of the world. Thus, despite good intentions, vocational education tended to pull

many of these students away from regular schooling. It also tended to foster the view that an appropriate response to the fear of failure is to avoid or remove oneself from positions of responsibility and challenge. In this way vocational education inhibited rather than enhanced the development of skills and relationships fundamental to the improvement of the students' chances for advancement in the world of education and work.

The implications of this interpretation are broad and complex. Most importantly, it is apparent that the scope of the problem far exceeds the capacity of vocational education to address it. Vocational education, at least at the classroom level, seems a humane and well-intentioned attempt to respond to the beliefs, attitudes, behavioral tendencies, and school experiences vocational students bring to their programs. This study makes clear that what these students bring to their programs is substantial. There is a considerable amount of socioeconomic and developmental inequality produced by and propagated in our workplaces and the structure of occupational opportunity (Braverman, 1974; Kohn and Schooler, 1978; Ogbu, 1978; Wright, 1979). Parents in the study seemed to have adapted to their positions in their workplaces and the economy, and this adaptation influenced greatly the developmental capacity of and the beliefs expressed in the home (for other reports of this pattern, see Ogbu, 1979, 1974; deLone, 1979; Bourdieu and Passeron, 1977; Kohn, 1977; Rubin, 1976). Students in the study entered school carrying this influence and manipulated, worked, and were sorted accordingly.

Vocational education cannot overcome such forces. In many respects it intervenes at a non-determining point. But, this is no rationale for accepting the status quo. If we want those students who currently tend to be unsuccessful in and alienated by school to pursue school seriously, we must take the notion of equality seriously. We can and must attempt to reform the structure of our schools and the workplaces and economy they reflect (see Claus, 1981, 1982 for discussions of work and school reform within a liberal and democratic framework). We must work to moderate the class segregation and

inequality so prevalent in our schools and workplaces today. Specific to current vocational program practice, we must design vocational programs to include a more diverse student population and to take a more aggressive interest in the development of critical decision-making and management skills. Along these lines we should emphasize entrepreneurial activities and promote high levels of participatory democracy in vocational education (see Levin, 1983; Hamilton and Claus, 1981; McArthur, 1980; O'Toole, 1977). Even though much of the problem may be rooted in structural inequality these are "here-now" program responses which have the potential to address some of the inequality underlying and currently reinforced by vocational education.

BIBLIOGRAPHY

Allan, R., and Gorth, W. 1979. Questions of efficacy: a review of state surveys. Voc Ed 54 (4): 48-51.

Anastasi, A. 1976. Psychological Testing (4th Edition). New York: Macmillian.

Apple, M.W. (Ed.) 1982. Cultural and Economic Reproduction in Education Routledge and Kegan Paul: Boston.

Apple, M. 1979. Ideology and Curriculum. London: Routledge and Kegan Paul.

Barton, P. and Fraser, B. 1978. Between Two Worlds: Youth Transition from School to Work; vol. 2: Programs and Experimentation. Washington, DC: Center for Education and Work, National Manpower Institute.

Beach, D. 1978. Necessary Work Values, Habits, and Attitudes: A Final Report. Jefferson City, MO: Missouri State Department of Education. ERIC document number ED 167 728.

Benson, C. 1981. Descriptive Study of the Distribution of Federal, State,and Local Funds for Vocational Education. unpublished manuscript cited in A. Weisberg, What research has to say about vocational education and the high schools. Phi Delta Kappah January, 1983: 355-359.

Bottoms, G. 1979. Communicating the effectiveness of vocational education. Technical Education News. 39(2): 16-17.

Bourdieu, P. and Passeron, J. 1977. Reproduction: In Education, Society and Culture. Beverly Hills: Sage.

Bowles, S. and Gintis, H. 1976. Schooling in Capitalist America. New York: Basic Books.

Braverman, H. 1974. Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century. New York: Monthly Review Press.

Bronfenbrenner, U. 1979. The Ecology of Human Development. Cambridge, Mass: Harvard Univ. Press.

Claus, J. 1982. Liberal philosophy and the education arguments for work reform. In D.H. Kerr (Ed.) Philosophy of Education 1982. Normal, Illinois: Philosophy of Education Society.

Claus, J. 1981. Radical reform within a liberal and democratic framework? Rawls and the radical critique of schooling. Education Theory. 31(2): 153-165.

Conroy, W. 1979. Some historical effects of vocational education at the secondary level. Phi Delta Kappan. 61(4): 267-271.

Cook, T. and Campbell, D. 1979. Quasi-Experimentation. Chicago: Rand McNally.

Cronbach, L. 1972. The Dependability of Behavioral Measurements. New York: John Wiley.

Darcy, R., Bolland, K., Farley, J., and Taylor, C. 1979. Examining Vocational Education Outcomes and Their Correlates. Columbus, OH: The National Center for Research in Vocational Education.

Davidson, T. and Johnston, J. 1976. High school boys in vocational education programs: facts and fallacies. The Vocational Guidance Quarterly. 25(2): 106-111.

deLone, R. 1979. Small Futures: Children, Inequality, and the Limits of Reform. New York: Harcourt Brace and Jovanovich.

Eisner, E. 1979. The Educational Imagination: On the Design and Evaluation of School Programs. New York: Macmillan.

Elson, D. and Gerken, S. 1979. Outcomes of Vocational Education in Virginia, 1979: A Summary of the Follow-up of 1977-1978 Secondary Vocational Education Completions in Virginia. Richmond, VA: Virginia Department of Education.

Far West Laboratory for Educational Research and Development. 1976. Educational Programs That Work. San Francisco: Far West Laboratory.

Fetters, W. 1974. National Longitudinal Study of the High School Class of 1972. Capsule Description of High Seniors. Washington, D.C.: National Center for Education Statistics.

Grasso, J. and Shea, J. 1979. Vocational Education and Training: Impact on Youth. Berkeley: The Carnegie Foundation for the Advancement of Teaching.

Hamilton, S., and Claus, J. 1981. Inequality and youth unemployment: can work programs work? Education and Urban Society 14(1): 103-126.

Hansen, J. 1979. Sociocultural Perspectives on Human Learning: An Introduction to Educational Anthropology. Englewood Cliffs, NJ: Prentice-Hall.

Kohn, M. 1977. Class and Conformity: A Study in Values. Chicago: University of Chicago: University of Chicago Press.

Kohn, M., and Schooler, C. 1978. The reciprocal effects of the substantive complexity of work and intellectual flexibility: a longitudinal analysis. American Journal of Sociology. 84(1): 24-52.

Levin, H.M. 1983. Youth unemployment and its educational consequences. Educational Evaluation and Policy Analysis. 5(2): 231-247.

Market Opinion Research. 1973. Employers and Young Adults Look at Vocational Education. Detroit: Market Opinion Research.

Mertens, D., McElwain, D., Garcia, G., and Whitmore, M. 1980. The Effects of Participating In Vocational Education: Summary of Studies Reported Since 1968. Columbus, OH: The National Center for Research in Vocational Education.

National Commission for Employment Policy. 1981. The Federal Role in Vocational Education. Washington, D.C.: National Commission for Employment Policy.

National Institute of Education. 1981. The Vocational Education Study: The Final Report. Washington, D.C.: National Institute of Education.

Office of Education Department Statistics. 1979. BOCES Statistics, Report #194. Albany: New York State Education Department

Ogbu, J. 1979. Social stratification and the socialization of competence. Anthropology and Education Quarterly. 10(1): 3-20.

Ogbu, J. 1978. Minority Education and Caste: The American System in Cross-cultural Perspective. New York: Academic Press.

Ogbu, J. 1974. The Next Generation. New York: Academic Press.

O'Toole, J. 1977. Work, Learning and the American Future. San Francisco: Jossey-Bass.

Pillemer, D. and Light, R. 1980. Synthesizing outcomes: how to use research evidence from many studies. Harvard Educational Review. 50(2): 176-195.

Rossi, P. and Berk, R. 1981. An overview of evaluation strategies and procedures. Human Organization. 40(4): 287-299.

Rubin, L.B. 1976. Worlds of Pain: Life in the Working Class Family. New York: Basic Books.

Silberman, H. 1980. The intrinsic benefits: non-economic returns of vocational education. Vocational Education, September.

Swanson, A. 1976. A Study of the Costs, Benefits, and Effectiveness of Occupational Education. Buffalo, NY: State University of New York at Buffalo. ERIC number ED 120 523.

Texas Advisory Council. 1978. Learning by Vocations: Views on Vocational Education by Former High School Students. Austin: Texas Advisory Council.

Walker, C., Claus, J., Bowers, J., and Ridley, D. 1982. Outcomes of Occupational Education: Phase III Report. Ithaca, NY: Cornell Institute for Occupational Education.

Weisberg, A. 1983. What research has to say about vocational education and the high schools. Phi Delta Kappan. January: 355-359.

Weiss, J. 1980. Assessing nonconventional outcomes of schooling. In D. Berliner (Ed.) Review of Research in Education. no. 8.

Woods, E.M. 1980. National longitudinal studies and data sets: Can they tell us the effects of vocational education? VOCED. 55(7): 35-38,63.

Wright, E.O. 1979. Class Structure and Income Determination. New York: Academic Press.

Wylie, R. 1961. The Self-Concept. Lincoln: University of Nebraska Press.